

You are invited to participate in a workshop at the U.S. Department of Energy's National Renewable Energy Laboratory.

Regional energy and water leaders will come together to discuss critical energy and water Issues.

Sponsored by NREL, EPA, USGS, Bureau of Reclamation, Western Area Power Administration and Colorado Water Resource Research Institute.

Register by February 11 Seating is limited.

## NREL Stakeholder Technology Forum

# Exploring the Energy/Water Nexus: A Stakeholder Dialogue for Identification of Critical Issues

Friday, February 25, 2005 10:00 a.m. – 2:30 p.m.

NREL Visitors Center, Golden, Colorado

Reliable, secure energy and fresh water supplies are vital to the prosperity of the U.S., and are a growing challenge in the American West. Energy and water are increasingly interdependent. Electric power generation requires large quantities of water, while oil and gas production produces large quantities of wastewater. The electricity industry is second to agriculture as the largest user of water in the U.S.. Similarly, potable water sourcing, treatment and distribution require considerable amounts of energy.

Energy demands are expected to grow substantially in Colorado and the region over the coming decades, and we are faced with near-term decisions that will have long-term impacts on our state and our citizens. Water availability, especially in the context of our recent drought, is increasingly demanding new approaches to its use and management.

This workshop will explore the Energy/Water Nexus with a focus on energy's impact in water development and quality, and water use and quality in energy production and delivery. Participants will identify critical issues to ensure adequate energy supply to support water availability and quality; reduce water use in the supply of energy; and advance energy and water sustainability for Colorado, the Rocky Mountains and the Great Plains. Anticipated results from the workshop include proceedings, a whitepaper and formation of a working group.













NREL's Visitors Center is located at NREL's South Table Mountain research facilities at 15013 Denver West Parkway in Golden, Colorado. From I–70, exit Denver West/Colorado Mills Boulevard (Exit 263) and proceed north one block. Turn west onto Denver West Parkway. Continue west past stop sign. Visitor Center is on the right. Register by Feb. 11 at <a href="mailto:stakeholderpartnerships@nrel.gov">stakeholderpartnerships@nrel.gov</a> or 303–275–3166. Tour participants must be US citizens with government–issued photo identification. For information, visit <a href="mailto:www.nrel.gov">www.nrel.gov</a>



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### Agenda

9:30 a.m. Registration

10:00 a.m. Welcome

Jeff Baker, Acting Manager, DOE Central Regional Office

**10:10** a.m. **Overview of Purpose** 

Stan Bull, Associate Director, Science and Technology, NREL

10:20 a.m. Keynote: Critical Issues in the West

Pam Inmann, Executive Director, Western Governor's

Association

11:00 Panel and Facilitated Discussion:

**Energy Demands for Public Water Supply** 

Moderator: Bob Wilkinson, University of CA, Santa Barbara

Panelists: Linda Reekie, Awwa Research Foundation

Todd Bartholf, CH2M HILL Larry Flowers, NREL

12:15 p.m. Networking Lunch

12:45 p.m. Panel and Facilitated Discussion:

Water for Energy: Exploring Water and Energy Supply

Linkages

Moderator: Maryanne Bach, U.S. Bureau of Reclamation Panelists: Bill Karsell, U.S. Bureau of Reclamation

Wayne Vanderschuere, CO Springs Utilities

2:00 p.m. Wrap up and next steps

2:30 p.m. Adjourn

2:45 p.m. Optional Tour of NREL

MREL develops renewable energy and energy efficiency technologies and practices, advances related science and engineering, and transfers knowledge and innovations to address the nation's energy and environmental goals.

FPA protects human health and the environment and leads the nation's environmental science, research, education and assessment efforts.

uscs provides reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life.

Bureau of Reclamation is the largest wholesaler of water in the nation the second largest producer of hydroelectric power in the western U.S.

#### Western Area Powe

Administration markets and delivers reliable, cost-based hydroelectric power and related services within the central and western U.S., carrying electricity from 55 hydropower plants with a capacity of 10,600 MW.

Colorado Water Resources

Research institute, an affiliate of Colorado State University, focuses the water expertise of higher education on the evolving water concerns and problems being faced by Colorado citizens.